

SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS IN SUB-SAHARAN AFRICA

The Role of Digital Innovation and
Emerging Technologies



Edited by

SATANG NABANEH & EBENEZER DUROJAYE

Sexual and Reproductive Health and Rights in Sub-Saharan Africa

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Sexual and Reproductive Health and Rights in Sub-Saharan Africa: The Role of Digital Innovation and Emerging Technologies

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Foreword

In my third report to the Human Rights Council in 2023, titled *Digital Innovation, Technologies and the Right to Health (A/HRC/53/65)*, I focused on the transformative and, at times, challenging intersection of digital technologies and the right to health. As the report detailed, the rapid growth of technological innovation is undeniably reshaping the landscape of healthcare, influencing the very availability, accessibility, acceptability and quality of essential facilities, goods, and services. Crucially, it also highlighted the significant implications of digital technologies for the fundamental rights to privacy and data protection.

The urgency created by polycrisis in global health, most notably the COVID-19 pandemic, catalyzed a rapid expansion of adoption of technological solutions within the health sector in ways not previously imagined. From sophisticated Artificial Intelligence-driven remote diagnostics to the widespread reliance of telemedicine, the swift development of mobile applications for vaccine verification and quarantine monitoring, the potential of digital tools became strikingly evident.

With regard to sexual and reproductive health rights, digital innovation and technologies offer important positive opportunities to actively address and overcome social inequalities by empowering marginalized groups to better meet their sexual and reproductive health needs by decreasing potential in-person violations or discrimination. Although digital technology cannot replace dignified care, it remains a vital component for information and education for marginalised groups.

Digital communication platforms have allowed for expanded access to medical abortion through telemedicine and self-managed abortion, two methods of abortion that are recommended by WHO. The expansion of telemedicine abortion was accelerated due to the pandemic – in response to it, a number of Governments lifted unnecessary restrictions on telemedicine abortion. In addition, an increasing number of networks, groups and individuals are using social media and other web platforms, mobile phone applications and other digital sources to provide information and support for people wishing to self-manage their abortion. In this way, informal groups and NGOs fill the gap left by States in the provision of abortion services. For pregnant people living in places where abortion is highly restricted, digital platforms may be among the only sources of information and support on medical abortion.

As I articulated to the Council in an interactive dialogue with member states, while these new technologies hold immense promise for fostering inclusion,

enhancing participation and creating novel opportunities to improve the underlying determinants of health, we must remain acutely aware that digital transformation, if not carefully navigated, can also undermine the right to health. This is particularly true when development, deployment and regulation occur without a fundamental consideration for their human rights impact.

Intrusive data collection practices, such as gathering menstrual information, tracking pregnancy test purchases and monitoring fertility, raise significant privacy concerns. This type of data can be collected without an individual's consent and, when shared by profit-driven entities without consent, can expose individuals to harassment, intimidation, and violence. This is particularly concerning for those seeking abortions in countries with highly restrictive laws or in regions where such laws are aggressively enforced. The data-mining of pregnancy-related information represents a serious invasion of women's and girls' right to privacy and can act as a significant deterrent to seeking necessary healthcare services. Moreover, technologies like Google Street View can also negatively impact women's health-service utilization due to fears of being identified as accessing specific healthcare facilities.

The imperative for all stakeholders to respect the principles of non-discrimination, equality and privacy in this digital age cannot be overstated. Furthermore, a robust policy approach grounded in the right to health, specifically concerning digital innovation and technology, is essential. Such an approach is vital to ensure transparency, accountability and accessible avenues for recourse when rights are violated in the digital health space.

However, as my report also underscored, the benefits of this digital revolution are not universally shared. Every society grapples with diverse digital divides, leaving significant portions of the population unable to access vital health information or services through digital platforms. These barriers, often rooted in disparities in education, economic status and internet access, frequently compound existing and pervasive forms of discrimination and exclusion, including racism, ableism and marginalization based on ethnicity, language and other factors. The pervasive "digital gender divide," which limits women and girls' access to, use of and ability to influence, contribute to and benefit from information and communication technologies, is a particularly concerning manifestation of these inequalities. Numerous other physical, economic and social barriers further impede inclusive participation in the digital transformation.

I continue to underscore and call for a fundamental shift towards a rights-based approach to digital health governance, one that ensures the meaningful participation of civil society and the communities most affected. This paradigm shift is crucial, particularly given the current dominance of the private sector in shaping the trajectory of digital health governance.

It is within this critical context that the timely and important edited volume, *Sexual and Reproductive Health and Rights in Sub-Saharan Africa: The Role of Digital Innovation and Emerging Technologies*, emerges. Inspired by the urgent issues and principles outlined in my thematic report, this book takes a crucial step forward by focusing specifically on the nuanced realities of sub-Saharan Africa. The editors, Satang Nabaneh and Ebenezer Durojaye, have skillfully

curated a collection of perspectives that significantly enlarge the conversation initiated on the global stage. The chapters explore specific legal, ethical and practical implications of digital innovation and technologies for the advancement of SRHR within a region characterized by its unique sociocultural dynamics, developmental challenges and burgeoning digital landscape. By bringing together a diverse range of scholars, practitioners and advocates, this edited volume illuminates the distinct opportunities and obstacles present in harnessing digital tools to empower women, girls and marginalized groups to realize their SRHR across sub-Saharan Africa.

This edited volume promises to be an invaluable resource for policymakers, researchers, and civil society organizations working to ensure that the promise of digital innovation serves to empower and uphold the SRHR of all individuals in the region, leaving no one behind in this rapidly evolving digital age.

Indeed, *Sexual and Reproductive Health and Rights in Sub-Saharan Africa: The Role of Digital Innovation and Emerging Technologies* is essential reading for anyone wishing to integrate an intersectional, rights-based approach to digital innovation and technologies to move towards substantive equality and create the conditions conducive to a life of dignity.

Dr. Tlaleng Mofokeng
UN Special Rapporteur on the Right to the Highest
Attainable Standard of Physical and Mental Health

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Preface

This book emerges from the Colloquium on Digital Innovation, Technologies and SRHR in Africa, organised by the Centre for Human Rights, Faculty of Law, University of Pretoria in November 2023, with funding from SIDA. This colloquium was directly inspired by the UN Special Rapporteur on the Right to Health's pivotal report (A/HRC/53/65), which underscored digital tools' transformative power in realising health rights, including SRHR. This volume dissects the resulting opportunities and inherent challenges at this critical intersection. The Special Rapporteur, who generously penned the foreword, highlights digital innovation's decisive role in shaping the availability, accessibility, acceptability and quality of essential SRHR services – cornerstones of Universal Health Coverage (UHC).

Recognising SRHR's fundamental importance for sustainable development and gender equality in Africa, and acknowledging the continent's rapid digital evolution alongside persistent SRHR access deficits, this book brings together academics and advocates to analyse technology's impact on advancing SRHR. It confronts the legal, ethical and practical ramifications of these innovations within the specific African landscape.

Employing a qualitative and interdisciplinary methodology, drawing strength on law, public health, technology, gender and development studies – reflecting the diverse expertise convened at the Colloquium – this book delivers a targeted analysis uniquely focused on sub-Saharan Africa's distinct sociocultural fabric, infrastructural realities, and policy environments, thereby differentiating itself from broader global studies.

Ultimately, this book seeks to provide crucial insights for policymakers, practitioners, researchers and advocates working to harness the transformative potential of digital innovations to advance SRHR across Africa in a manner that is safe, equitable and rights-based, contributing to improved health outcomes and gender equality on the continent.

Satang Nabaneh
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Chapter 1

Digital Innovation, Technologies and the Right to Sexual and Reproductive Health

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Abstract

Digital innovation and emerging technologies are significantly transforming the right to health, including Sexual and Reproductive Health and Rights (SRHR). These technologies, encompassing a wide array of tools and services, have become increasingly crucial, particularly with the expansion of mobile phone networks in developing nations and the accelerated adoption resulting from the COVID-19 pandemic. In African countries, digital health solutions are being increasingly utilised for various healthcare services, including remote consultations and health awareness initiatives. While offering vast opportunities, the increasing reliance on digital technologies in health also introduces risks, particularly concerning the right to privacy, data security and potential misuse of sensitive personal health information. This chapter provides an overview of the motivation behind this book, highlighting the critical need to leverage digital innovation for advancing SRHR in Africa, and then outlines the book's structure and content. A robust normative framework is essential to guide the application of these technologies in a manner that respects and promotes the right to health while ensuring that they do not undermine socio-economic rights.

Keywords: Digital technologies; assisted reproductive technologies; African Commission on Human and Peoples' Rights; African Committee on the Rights of Children Adolescents and Youth; United Nations; access to information

1. Introduction

In recent years, digital innovation and emerging technologies have demonstrated tremendous potential in transforming the right to health, including Sexual and Reproductive Health and Rights (SRHR).

Digital technologies encompass a wide array of tools, applications, services, and underlying hardware and software.¹ Digital technologies enable services and activities through electronic methods focused on the creation, storage, manipulation, transmission and presentation of data. These technologies commonly involve devices such as computers, digital television, radio, mobile phones and robots. The expansion of mobile phone networks in developing nations has made digital technologies a crucial tool with significant potential to improve women's sexual and reproductive health (SRH) outcomes.²

The COVID-19 pandemic in 2020 led to widespread lockdowns globally, including in Africa, compelling people to seek digital alternatives for daily activities like shopping, socialising, working and accessing information, resulting in increased Internet and mobile device usage. This surge in technology adoption extended to the health sector during the lockdown and has persisted post-pandemic. In African nations like South Africa, healthcare delivery during and after the pandemic has increasingly relied on digital technologies such as SMS solutions, mobile health apps, telemedicine, telehealth, WhatsApp systems, AI and chatbots, and robotics.³ These technologies in Africa have been primarily utilised for various healthcare services, including screening for infectious and non-infectious diseases, disease surveillance and monitoring, medication adherence support, health awareness and communication, remote consultations and electronic prescriptions, remote laboratory and pharmacy services, and remote education and training.⁴

Globally, more than 150 nations have implemented comprehensive data protection laws to safeguard individuals and their data.⁵ Research also indicates that 25 countries within sub-Saharan Africa have established thorough personal data

¹FP Tulinayo, P Ssentume and R Najjuma 'Digital technologies in resource constrained higher institutions of learning: A study on students' acceptance and usability' (2019) 15 *International Journal of Educational Technology in Higher Education* 1.

²See LJ Bacchus and others 'Using Digital Technology for Sexual and Reproductive Health: Are Programs Adequately Considering Risk?' (2019) 7 *Global Health: Science and Practice* 519.

³E Mbunge et al. 'Virtual healthcare services and digital health technologies deployed during coronavirus disease 2019 (COVID-19) pandemic in South Africa: a systematic review' (2022) 6 (7) *Global Health Journal* 102–113.

⁴AE Fischer and others 'Changes in Perceptions and Use of Mobile Technology and Health Communication in South Africa During the COVID-19 Lockdown: Cross-sectional Survey Study' (2021) 5 *JMIR Form Res* 1, 2.

⁵David Banisar, 'National comprehensive data protection laws and bills 2023' https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1951416 (accessed 10 February 2025).

protection legislation.⁶ Addressing the opportunities and potential challenges presented by these global trends requires a robust normative framework to guide their application in a manner that respects and promotes the right to health.

2. Normative Framework

The use of digital technologies cannot be undermined, as these have emerged as a transformative force across the health sector.⁷ Article 25 of the Universal Declaration of Human Rights (UDHR),⁸ Articles 2(2) and 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR),⁹ Article 12 of the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW),¹⁰ Article 24 of the Convention on the Rights of the Child (CRC)¹¹ and Article 25 of the Convention on the Rights of Persons with Disabilities (CRPD)¹² recognise the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, and this includes SRHR. The right to health is also recognised under the African human rights system, particularly in Article 16 of the African Charter on Human and Peoples' Rights, Article 14 of the African Charter on the Rights and Welfare of the Child and Article 14 of the Protocol to the African Charter on the Rights of Women (Maputo Protocol).

This right is supposed to be enjoyed by everyone regardless of factors such as their race, gender, age, religion, social origin or status.¹³ It is believed that digital technologies are very important in the realisation of this right, including SRHR, because they offer wide coverage, which allows messaging to be targeted to particular groups or individuals, thus enhancing the delivery of SRHR services.¹⁴

⁶Human Rights Council 'Report of the United Nations Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health Dr Tlaleng Mofokeng report on Digital innovation, technologies and the right to health 2023' (21 April 2023) A/HRC/53/65.

⁷T Tamrat and others 'Exploring the Use and Implications of AI in Sexual and Reproductive Health and Rights: Protocol for a Scoping Review' (2024) 13 *JMIR Research Protocol* 1.

⁸United Nations General Assembly 'The Universal Declaration of Human Rights (UDHR)'. New York: United Nations General Assembly, 1948. Although this is a Declaration, it is important because it inspired the drafting of other important human rights instruments such as the ICESCR and the ICCPR.

⁹International Covenant on Economic, Social and Cultural Rights (ICESCR) A/RES/2200.

¹⁰Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) A/RES/34/180.

¹¹Convention on the Rights of the Treaty no. 27531. United Nations Treaty Series, 1577.

¹²Convention on the Rights of Persons with Disabilities. Treaty Series, 2515, 3.

¹³See Articles 25 UDHR, 2(2) & 12 ICESCR, 12 CEDAW, 24 CRC, 25 CRPD.

¹⁴E Mbunge and others 'Virtual healthcare services and digital health technologies deployed during coronavirus disease 2019 (COVID-19) pandemic in South Africa: a systematic review' (2022) 6 *Global Health Journal* 104–106.

In addition, the Committee on Economic, Social and Cultural Rights (CESCR) reiterated that functioning public health and healthcare facilities, goods, services and programmes must be available in sufficient quantity within a state party.¹⁵

The CESCR in its General Comment 25 (2020) has echoed this position, noting that while science and technologies are important in the peace and overall well-being of individuals, efforts should be made that they do not undermine the enjoyment of socio-economic rights, including the right to health.

In recent years, digital innovation and emerging technologies have demonstrated tremendous potential in transforming the right to health, including SRHR. In light of the great opportunities offered by the rapid advancements in digital innovation and emerging technologies, the UN Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Tlaleng Mofokeng, presented her thematic report focused on the intersection of digital innovation, technologies and the right to health in June 2023.¹⁶ In this report, the Special Rapporteur underscores the fact that digital innovation and technologies are redefining and reshaping the right to health, consequently strengthening the ability of governments across the globe to respect, protect and fulfil the right to health. The report emphasises that digital innovation and technologies play a key role in determining not only the availability, accessibility and acceptability of health services but also the quality of facilities, goods and services people receive. According to the Special Rapporteur, ‘Digital health innovation and technologies should improve the availability, accessibility, acceptability and quality of health services for all.’¹⁷ This implicitly includes access to SRH services. The Special Rapporteur notes:

Telehealth services can help health systems overcome such barriers as shortages of health-care providers in low- and middle-income countries due to “braindrain”. Primary care patients can answer clinical queries via email or secure messaging systems to receive written health advice and clarification of medication or treatment plans.¹⁸

While the Special Rapporteur recognises the benefits of technologies to the enjoyment of the right to health, including SRHR, she points out that digital technologies may sometimes undermine the enjoyment of the right to privacy and further deepen inequality in society.¹⁹

In addition, the Human Rights Council resolution 47/16 on the promotion, protection and enjoyment of human rights on the Internet emphasises the need to

¹⁵Para. 12(a) CESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12) Adopted at the Twenty-second Session of the Committee on Economic, Social and Cultural Rights, on 11 August 2000, E/C.12/2000/4.

¹⁶Human Rights Council (n 6 above).

¹⁷As above, para 13.

¹⁸As above, para 27.

¹⁹As above, para 29.

foster affordable and reliable connectivity, digital access, and digital inclusion.²⁰ This resolution also advocates for the expansion of accessible and inclusive public services, including remote education and digital health services. Furthermore, it underscores the importance of ongoing efforts to promote access to information online and to facilitate ‘affordable and inclusive education, health, justice and other public services globally’, while also highlighting the necessity of addressing digital literacy and bridging digital divides.²¹

The Special Rapporteur on the right to freedom of opinion and expression, referencing relevant international human rights law, indicates that ‘all technologies must be designed, developed and deployed so as to be consistent with the obligations of States and the responsibilities of private actors under international human rights law’.²²

Access to information is a crucial component of the right to health, encompassing the freedom to seek, receive and share knowledge and ideas related to health issues. States bear the responsibility of ensuring this right. This obligation to fulfil the right to health necessitates that governments actively engage in information campaigns and the dissemination of appropriate health-related information. Moreover, the duty to respect this right requires that States refrain from withholding or intentionally misrepresenting health information, which should be both acceptable and of high quality. It is also important to recognise that the right to health includes access to education and information concerning health, particularly regarding SRH. Therefore, ensuring accessible and accurate health information is a fundamental aspect of upholding the right to health.

3. Digital Innovation and Technologies and the Right to Health, Including Sexual and Reproductive Health and Rights

Digital health innovation and technologies should improve the availability, accessibility, acceptability and quality of health services for all. To guarantee the enjoyment of the right to health for all, States must ensure that all health facilities, goods and services are respectful of medical ethics and culturally appropriate, namely respectful of the culture of individuals, minorities, peoples and communities, sensitive to gender and life-cycle requirements, and designed to respect confidentiality and improve the health status of those concerned.²³

²⁰Human Rights Council ‘The promotion, protection and enjoyment of human rights on the Internet: resolution’, adopted by the Human Rights Council on 13 July 2021, A/HRC/RES/47/16.

²¹As above, para 7(b).

²²UN General Assembly ‘Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression’ (29 August 2018) A/73/348, para. 19.

²³Committee on Economic, Social and Cultural Rights, general comment No. 14 (2000), para 12.

Recognising the significant potential presented by the rapid progress in digital innovation and emerging technologies, the UN Special Rapporteur on the right to health's thematic report, as discussed above, specifically examined the relationship between these advancements and the right to health.²⁴ This report highlights the transformative impact of digital innovation and technologies, noting that they are fundamentally altering our understanding and delivery of healthcare. As a result, governments worldwide have an enhanced capacity to uphold, safeguard, and ensure the right to health for their populations. The report further emphasises the crucial role of these technologies in shaping not just the availability, accessibility and acceptability of health services but also the quality of the infrastructure, resources and care that individuals receive.

The right to SRH is an integral part of the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.²⁵ Digital innovation and emergent technologies wield considerable influence in the advancement of SRHR, particularly in augmenting access to pertinent services, as this volume shows.

However, alongside these significant opportunities, the increasing reliance on digital technologies in health introduces nuanced risks that demand careful consideration, particularly concerning the fundamental right to privacy. This is especially pertinent, as these technologies often involve the collection, storage and analysis of sensitive personal health information, raising questions about data security, consent and potential misuse. In this context, the right to privacy, protected under Article 17 of the International Covenant on Civil and Political Rights (ICCPR), becomes particularly relevant. Any infringement upon this right must adhere to strict standards of legality, necessity and proportionality.²⁶ States bear the obligation to refrain from any interference inconsistent with Article 17 and should establish legal frameworks to prevent such actions by both individuals and organisations.²⁷ The Human Rights Committee's General Comment No. 16 (1988) also highlights the crucial need for States to ensure that personal information is protected from unauthorised access, processing and use, and that it is never employed for purposes incompatible with the Covenant.²⁸ Furthermore, individuals should have the right to know which public or private entities control or may control

²⁴Human Rights Council (n 6 above).

²⁵Committee on Economic, Social and Cultural Rights, general comment No. 22 (2016), paras. 1 and 25.

²⁶See United Nations, Economic and Social Council, Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights, U.N. Doc. E/CN.4/1985/4, Annex (1985).

²⁷See UN General Assembly 'Report of the Office of the United Nations High Commissioner for Human Rights: The right to privacy in the digital age' (30 June 2014) A/HRC/27/37.

²⁸UN Human Rights Committee (HRC), 'CCPR General Comment No. 16: Article 17 (Right to Privacy), The Right to Respect of Privacy, Family, Home and Correspondence, and Protection of Honour and Reputation' 8 April 1988.

their personal data.²⁹ This underscores the critical importance of safeguarding privacy in the evolving landscape of digital health.

At the regional level, the African Commission in 2016 adopted Resolution 362 on the Right to Freedom of Information and Expression on the Internet in Africa.³⁰ The Commission notes ‘the Internet is important in advancing human and peoples’ rights in Africa, particularly the right to freedom of information and expression’.³¹ It urges states to refrain from ‘interrupting or limiting access to telecommunication services such as the Internet, social media, and messaging services, increasingly during elections’.³²

The African Commission in 2019 adopted the Declaration of Principles of Freedom of Expression and Access to Information in Africa (the Declaration).³³ This replaced the Declaration of Principles on Freedom of Expression in Africa, which the African Commission adopted in 2002. It protects individuals’ rights to access to information, including digital information. More importantly, it cautions states to desist from interfering with individuals’ access to all information, including digital information.³⁴ This statement provides a strong basis for individuals to seek digital information in order to realise their SRHR.

Although digital innovation and technologies present compelling prospects for the enhancement of SRHR and the expansion of essential service provision, their judicious regulation remains paramount. The development, deployment and governance of these digital transformation instruments must be undertaken with meticulous consideration of their broader human rights ramifications, so as to preclude any infringement or erosion of economic, social, cultural, civil and political rights, including the fundamental right to health. The Committee on ESCR in its General Comment 25 (2020) has echoed this position, noting that while science and technologies are important in the peace and overall well-being of individuals, efforts should be made so that they do not undermine the enjoyment of socio-economic rights.³⁵

Furthermore, the deployment of digital technologies can lead to data collection and surveillance practices that encroach upon various fundamental

²⁹As above.

³⁰African Commission on Human and Peoples’ Rights (ACHPR) ‘Resolution on the Right to Freedom of Information and Expression on the Internet in Africa’ ACHPR/Res.362 (LIX)2016.

³¹As above.

³²As above.

³³Adopted by the African Commission on Human and Peoples’ Rights (the African Commission) at its 65th Ordinary Session which was held from 21 October to 10 November 2019 in Banjul.

³⁴Principle 5 Declaration of Principles of Freedom of Expression and Access to Information in Africa (the Declaration) 32nd Session, 17 – 23 October 2002: Banjul, The Gambia.

³⁵CESCR ‘General comment No. 25 (2020) on article 15: science and economic, social and cultural rights’ 30 April 2020, E/C.12/GC/25.

rights, including the right to privacy.³⁶ The High Commissioner for Human Rights has also observed that the functioning of artificial intelligence systems has the potential to broaden, intensify or incentivise intrusions upon the right to privacy, particularly concerning the collection and utilisation of personal data.³⁷

States bear the duty to safeguard all human rights within the sphere of business operations, encompassing the technology sector, which includes protecting individuals from rights-infringing actions by private entities.³⁸ Similarly, businesses hold a responsibility to respect human rights that extends beyond mere compliance with national laws and the capacity or willingness of States to act. Consequently, when developing, adopting and deploying digital technologies and artificial intelligence, businesses should be guided by their responsibilities under international human rights law and standards.³⁹

The Guiding Principles on Business and Human Rights establish a universal benchmark for expected business conduct, applicable to entities such as social media and search companies.⁴⁰ These guidelines on what it means for businesses to respect human rights should shape how international technology companies understand their responsibilities. To fulfil their responsibility to respect human rights, businesses are expected to undertake several measures. These include establishing policy commitments to uphold this responsibility, implementing effective human rights due diligence processes to identify, prevent, mitigate and account for their impact on human rights, and establishing mechanisms to enable the remediation of any adverse human rights impacts they cause, contribute to or are linked to.⁴¹

On a national level, various States have initiated efforts to regulate artificial intelligence. For instance, the World Health Organization (WHO) has noted that Japan has established several guidelines governing the application of artificial intelligence, encompassing both research and development, as well as its utilisation.⁴² The Government of Australia is in its early development and release of artificial intelligence ethics principles, underscoring its commitment to the OECD's principles on artificial intelligence.⁴³

³⁶GSMA 'Connected women, the mobile gender gap report 2020' (March 2020) <https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2020/05/GSMA-The-Mobile-Gender-Gap-Report-2020.pdf> (accessed 15 February 2025).

³⁷UN General Assembly (n 27 above).

³⁸As above, para 65.

³⁹As above, para 48.

⁴⁰UN Guiding Principles on Business and Human Rights (2011) <https://www.undp.org/sites/g/files/zskgke326/files/migration/in/UNGP-Brochure.pdf> (accessed 10 February 2025).

⁴¹As above.

⁴²World Health Organization (WHO) 'Ethics and Governance of Artificial Intelligence for Health' (28 June 2021) <https://www.who.int/publications/i/item/9789240029200> (accessed 10 February 2025).

⁴³Submission of Australia to HRC (n 6 above) 16.